CLAIM AMENDMENTS

1. (currently amended) A patient warming apparatus, said patient warming apparatus comprising a base having a patient platform on which a patient is adapted to be positioned, a heater mounted to the base and having a heater element adapted to direct heat toward the patient platform to warm a patient lying thereupon, a controller for controlling the electrical energy applied to the heater element to control the heat therefrom, a voltage sensor to directly determine the voltage of the electrical energy across the heater element, a current sensor to directly determine the current passing through the heater element, said controller adapted to use only those measured values of the voltage sensed by the voltage sensor and the current sensed by the current sensor to directly determine the power delivered to the heater element, an input to set the desired power to be supplied to the heater element, and a controller to establish ~~controlling~~ the ~~that~~ power delivered to the heater element to be the ~~a~~ ~~predetermined~~ desired power to the heater element.

2. (original) The patient care apparatus as defined in claim 1 wherein the heater is mounted to the base above the patient platform and the heater element is a radiant heater that emits infrared radiation toward the patient platform.

3. (original) The patient care apparatus as defined in claim 2 wherein said patient warming apparatus is an infant warmer.

4. (original) The patient care apparatus as defined in claim 1 wherein said controller controls the power to the heater element as a percentage of the full rated power of the heater element.

5. (original) The patient care apparatus as defined in claim 1 wherein said controller samples the voltage and current sensed at a rapidly pulsed sampling rate.

6. (original) The patient care apparatus as defined in claim 5 wherein said pulsed sampling rate exceeds 1000 samples per second.

7. (original) The patient care apparatus as defined in claim 1 wherein said controller controls the power to the said heater element by controlling the pulse width of the electrical energy to the heater element.

8. (currently amended) A method of controlling the power applied to the heating element of a heater of a patient warming apparatus, said method comprising the steps of:

providing a patient warming apparatus having a heater with a heater element,

energizing the heater element with electrical energy,

sensing the current passing though the heater element,

sensing the voltage across the heater element,

using only the sensed values of the voltage and current sensed to directly determine the power applied to the heater element, ~~and~~

setting a desired value of power to be delivered to the heater element, and

controlling the power to the heater element to provide the set desired value of ~~a predetermined~~ power to the heater element.

9. (currently amended) The method as defined in claim 8 wherein the step of setting a desired value of power to be delivered to the heater element providing a predetermined power to the heater element comprises setting ~~providing~~ a predetermined power based upon a predetermined percentage ~~f~~ of the maximum power.

10. (original) The method as defined in claim 8 wherein the step of providing a patient warming apparatus comprises providing a patient warming apparatus having a radiant heater with a heater element adapted to emit infrared energy.

11. (original) The method as defined in claim 10 wherein the step of providing a patient warming apparatus comprises providing an infant warmer.

12. (original) The method as defined in claim 8 wherein the step of controlling the power to the heater element comprises controlling the pulse width of the electrical energy to the heater element.

13. (original) The method as defined in claim 8 wherein the step of sensing the current and sensing the voltage comprises sensing the current and sensing the voltage at a rate in excess of 1000 samples per second.